The Bulletin

OF THE

South Indian Medical Association.

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G. O. Mis. 1006 P. H. DATED 5th JUNE 1931 REGARDING MEDICAL ATTENDANCE.

All Government servants declared eligible for examination at the Pathological, Bacteriological or Biochemical laboratories of Government Hospitals—free of charge whether sent by their official medical attendant or not.

Order :—

"The Government approve of the Surgeon-General's proposal that Government servants should be examined free of charge at Pathological, Bacteriological or Biochemical laboratories of Government Hospitals whether sent by their medical attendants or by *private registered* medical practitioners".

BULLETIN

OF THE

SOUTH INDIAN MEDICAL ASSOCIATION.

JUNE, 1931

GENERAL NOTES.

We understand that the Public Services Commission has finished its selection of the Professor of Pathology for the Madras Medical College. The rumour is that Dr. Goyle of the Indian Research Department has been selected and if it is true we congratulate the Commission on its choice. Dr. Goyle has a brilliant record behind him and we are sure that a research spirit and, more than that, a research *direction* will soon pervade the Pathology department.

* * *

Coming as it does from the Services Commission, a body which under the Presidentship of Sir Norman Marjoribanks, is admitted to be free from political or other influences this choice will be welcomed as based purely on merit and an instance of "fair field and no favour." We believe that the nomination is only waiting to be ratified by the Government and hope that at least before the academic session is advanced, orders will be issued to enable the permanent incumbent to take over charge.

* * *

We understand that no effort is being spared by the Madras Provincial Medical Service to stop the appointment of Dr. Goyle and keep it as one of its preserves We believe, we are subject to correction, that the Madras Provincial Medical Service was a staunch supporter of open recruitment for teaching appointments. It had definitely committed itself to that policy in the memorandum it submitted before the Islington Commission.

* * *

But, then its fight was with the Indian Medical Service and the restriction of the higher appointments to members of that Service. Probably now that that Service has lost its predominant position, it is no wonder that the Provincial Service, which claims to be the legal inheritor of all the assets but *no liabilities* of the I.M.S , fights shy of open recruitment. If, with all the dice loaded in their favour, the provincial aspirants had to make way for an *externe* they have only to thank themselves. Anyhow, this selection has set at rest the bogey of *European Importation* with which, we understand, the Provincial Service has been frightening our local politicians.

* * *

We have referred to the attempts that are being made to cancel the nomination of Dr. Goyle. It was a high official of the Provincial Service who remarked that where frontal attacks are of no avail, flank attacks might succeed ; and it is no wonder that since they have no cause other than self-interest to stand upon these flank

attacks have been started. We understand that the latest report is that the poverty budget is brought in as a reason to prevent the appointment of Dr. Goyle. We do know the source of the inspiration and the pressure that is being brought to bear. We trust that the Government will not yield to these advices of false economy as there is nothing so costly as a cheap inferior article.

* * *

Whilst the Presidency is too poor to get a non-service Pathologist it does not seem to be in want of funds when it comes to matters of pay and allowances. Then it is another story. "Madras has *really* no deficit budget." One feels that the latter is true as in, at least, the Medical department there does not seem to be any shortage of money for payment to the Services. Whilst other Governments are pruning their establishments, ours' believes in expansion; and as one wants a contented Service what is more natural than paying them what they ask !!

* * *

We do not see any practical proposal so far, for either the reduction of cadre or the abolition of the many allowances which we find against the names of our provincial colleagues We find them still on their periodical joy rides and the tendency to increase the cadre not only of the lower ranks but of the highly paid civil surgeon still continues. What we would suggest, if the Government really means business, is to initiate a ruthless scheme of retrenchment, at least, in the higher ranks of the Service.

* * *

What we feared have come to pass. The local Government has issued orders that an Honorary Officer, if he wants to avail himself of leave, has to resign his appointment. We cannot congratulate the Government on this decision. If the Government wants to kill the honorary system a surer method could not be adopted. Whilst every incentive, financial and other facilities are given to its paid medical officers, this step-motherly attitude of the Government towards the honoraries is highly deplorable. "To him that hath, more shall be given."

* * *

The Honorary Medical Services Committee will, we understand, meet before the middle of the July. This with other complaints and suggestions which we have been receiving from various members of the Profession (both service and independent) and the Public regarding the present and future working of the system have been referred to the proper authorities for consideration and discussion at the meeting.

* * *

We invite the attention of our readers to an important G.O. regarding the facilities for private practitioners in examinations done at the Government laboratories. This privilege had been given as far as the X-ray institutes were concerned but has been extended to the Bacteriological, Pathological and Bio-chemical Institutes. We thank the Government for this concession and hope beforelong that extended facilities will be available for the private practitioners in the Government Institutions.

* * *

The Rural Medical Practitioners will soon lead a deputation to the Hon'ble Minister for Public Health. They have a big list of grievances and at their last annual conference these were considered in detail and important resolutions were passed. We are sure they have reached the Government. And in spite of Government Orders the local satraps are bent of having their own way. We have in our issues freely ventilated their legitimate grievances and

implored Government help and if necessary Government interference.

* * *

We do admit that there is a feeling both on the part of the authorities and on a certain section of the *Rural* practitioners that the scheme is mainly intended to solve the problem of unemployment amongst medical men. Conversion of these rural dispensaries into branch aided dispensaries on an analogy with the Branch Post Offices or grant-in-aid Schools, that on expansion these may be converted into pucca Government institutions, and that the existing staff have a priority right for all Government appointments have been opinions expressed by some rural medicoes. The Taluk Board Presidents, on the other hand, want to continue to hold the big stick over these rural practitioners and utilise these to consolidate their position in the political sphere. Both these views react viciously on each other and cannot help in extending medical relief to the villages and will prevent the growth of a healthy Independent Medical Profession. The only solution to safeguard the interests of the rural medical practitioners is to take them away from the autocratic control of these Taluk Board Presidents and to have their affairs dealt with by a committee consisting of the Collector of the district, a representative of the District and Taluk Boards and two medical men elected from among the registered medical practitioners by themselves.

* * *

Unless the view is brought home that the rural medical practitioner is primarily a private practitioner with a subsidy to look after the indigent population and that so long as he sees to this, there shall be no interference from the local authorities and that he need do other work like health inoculation or other quasi-government duties only if he is willing and at a remuneration acceptable by him, rural medical scheme will not be the success that it ought to be. The only alternative, we can suggest, would be to provincialise rural medical relief and utilise the provincial paid staff to explore the rural areas and pioneer the cause of scientific medicine in those areas. This could be accomplished without any extra expense by releasing a large number of them from the Urban hospitals and replacing them there by honorary practitioners, with the stipend now paid to the rural men as compensation for doing the collateral government work. We think this feasible as with the pay and prospects of the Service and freedom from interference from the local boards these paid officers would be able to devote their entire time in the interests of the ailing Public.

* * *

We have been advised that a large number of the general Public are taking a keen interest in the Bulletin, and that an educative section may be introduced with the object of placing pure medical subjects before the members of the lay public, free of unnecessary technical jargon. We have therefore decided to add one such medical article in our issues and accordingly we publish in this number an interesting monograph on Pernicious Anæmia.

EDITORIAL.

Retrenchment in the Medical Department.

RECRUITMENT.

The committee appointed by the Government to scrutinize the proposals for retrenchment in the current and projected expenditure in the various departments has begun to work. We find that among others the *medical department* and that of Public Health are also mentioned where retrenchment is to be considered. There are rumours that the salaries of the medical staff are to be reduced by a small per cent and that some of the many allowances that are donated to a large number of them may be reduced or withdrawn. These are directions in which some money might be saved by the Government. But it would be a very negligible segment of the total expenditure. There are other and more valuable directions in which a *courageous* Government, well served by capable advisers, should proceed if it is genuinely anxious to run the medical department economically and efficiently.

One of the main lines in which it could proceed is to expand the honorary scheme. Fortunately, the Government has realised in time the usefulness of this scheme and has made up its mind to expand it and since a committee is shortly to consider the best feasible ways of achieving this object we need not dwell on this subject now. But expansion of this scheme, however wide, cannot reduce the present expenditure. In other departments we hear of suggestions for stopping fresh recruitment to the various services and a fear that such procedure might lead to eventual inefficiency and arrest of essential progress. Fortunately such fears have no place in the medical department. New *clinics* and *departments* could be organised and run with the honorary aid of private medical practitioners settled in various towns and taluk head-quarters, or these departments could be organised with the existing paid staff and their places taken by the practitioners who are prepared to give their services free under certain reasonable conditions.

There have been rumours and contradictions that a competitive examination is shortly to be held to select candidates for the Madras Medical (Provincial) Service. Recruitment ordinarily is meant to provide for ordinary wear and tear in the department and for purposes of opening new centres of medical relief or increasing the efficiency of existing clinics. As pointed out above, these objects could be easily gained by inducing a large number of medical men to volunteer their services free. We are not sanguine that our advice would be heeded. For it was but recently that we have had the spectacle of the Government recruiting a number of young men to the cadre of sub-assistant surgeons closely following its decision to appoint a number of honorary sub-assistant surgeons. It is incongruous to plead poverty while the next minute you squander what you have. This question of fresh recruitment to the paid medical services bears so closely on the policy of the honorary scheme that we should be pardoned if we ask whether the Government knows its mind and whether it really means business when it talks of expansion of the honorary scheme. There are, besides, other reasons why the Government should postpone, if not altogether stop, fresh recruitment to the medical services. The view is crystallising that the salaries of all Government services should be materially lessened in the very near future. And in the medical department, the question of allowing paid medical men

the freedom of private practice has to be seriously tackled without further waste of time. To hasten recruitment under such uncertain conditions is to commit the country to avoidable expenses and to prolong the bane of an incorrect policy. In any case, there is no need for holding a competitive examination for selection of candidates immediately, since we understand that the candidates that have been selected at the last examination have not all been absorbed as yet and that it would take at least a few months at the earliest before all of them could be taken into the cadre.

Right principles of provision of medical relief and interests of economy no less demand that there should be no fresh recruitment to the medical service for the present, and therefore that no competitive examination for selection should be held in the near future. We trust that the Government and the members of the Retrenchment committee would do the obvious and right thing as regards this question of immediate recruitment.

MULTIPLICATION OF OFFICERS.

It is common to find at the present time that where previously one officer was looking after certain duties, two officers are appointed and the duties apportioned. Not alone in dress, but also in administrations there seems to be *vogues*. For revenue purposes some districts have been halved, or portions of certain districts have been regrouped with new districts. In parallel, responsibility has been divided and duties have been re-aligned in the medical department also. We shall give an instance or two. About 20 years ago the Principal and the Superintendent of the General Hospital were one and the same person. For other reasons than increase of work, this appointment was abolished and the two duties were redistributed among the staff of the college and the hospitals. Till recently, the Royapuram Hospital and Medical School were administered by a single officer *viz.*, First District Surgeon. A few years ago for some reason or other —we wonder whether it was to provide a field for the administrative ability of *a* provincial service officer or to create another civil surgeoncy for the provincial service—this place was apportioned between two highly paid senior officers, *viz.*, the District surgeon and a senior selection grade Provincial civil surgeon. The Government could easily go back to the old order of things without any loss of efficiency and a good deal of economy.

STUDY LEAVE.

It is our experience that interested members of the services are inclined to be emotional whenever this question is the subject of argument. We are therefore very reluctant to dwell on this subject. But when one hears so much talk about economy in administration, one is compelled to enquire into it even at the risk of being branded as reactionaries. We need not trace its origin, nor the analogy on which it has been founded. It is enough for our purpose to enquire into its present policy and the benefits it is meant to bring to the country. It is recognised by all that medical men should be life-long students, learning from their patients and learning from books right through their active professional career. But it so happens that the busy practitioner has not the leisure nor the energy to keep abreast of the ever growing literature on medical subjects. And the practitioner in places far removed from medical and other educational institutions and libraries lacks the facilities even if he has the willingness, leisure and energy to keep level with current knowledge. It is good for them to have opportunities to visit large teaching hospitals and laboratories and to attend the wards and classes for a few

weeks or months to get familiar with recent advances and innovations in the service and practice of their specialities. The majority of the practitioners, independent as well as those in paid services, would belong to either of these groups. Their needs could be and should be met by the two University Medical institutions with the associated hospitals. The two medical schools and the hospitals grouped about them should also be helpful to this purpose to a great extent. If the resources of the State are well husbanded, money could be found to increase the efficiency of these schools to such standards that they would be available for post-graduate work and learning. We hold therefore that there is no justification for the practitioners referred to above to go to foreign countries to see, learn and do things which could be easily made available nearer home. We do not suggest that none of them should go out of India for higher learning. If any individual practitioner feels the urge and can finance himself for the purpose, he is at liberty to do so and nothing that we or others say reasonably do can hinder them. In fact we would exhort as many of them as could go out, not to let slip an opportunity. But what we say and insist on is that *public funds should not be wasted* on such ventures.

Study Leave and Service.

Study leave is a prominent feature of all the grades of medical services in this presidency and probably in the country. We shall begin with the I. M. S., recognised as superior to other grades of service. Such of these officers who are on the staff of teaching institutions should have this privilege for reasons which we will set forth presently, but we question the propriety of granting study leave to others when the officers can take ordinary leave or furlough leave during which period they could as well attend a few clinics if they are at all keen on their professional efficiency. We look forward to the spirit of the times to set right a few of the anomalies that are obvious in this service. And it is not without significance that some officers of this service have practically forsworn this privilege.

The members of the provincial and subordinate medical services are keen on this privilege. These men ask for and obtain study leave with the ostensible purpose of enriching themselves with knowledge and experience not available here. But in practice it has degenerated merely to an effort to make use of foreign diplomas for official preferment. Whatever the rules and requirements, sub-assistant surgeons in service go to England for the purpose of obtaining registrable qualifications that they might be promoted to the cadre of assistant surgeons. This is quite a healthy ambition, but we ask in all earnestness could not this desire be granted without the intolerable waste of time and talent and inexcusable waste of public funds. As it is, a few senior sub-assistant surgeons are selected for promotion to the provincial service cadre without the need for higher examination or post-graduate study. Is there any valid reason why more should not be so promoted after they have undergone some post-graduate training and study in the local institutions? Why make a fetish of the foreign registrable qualification at the expense of some thousands of rupees from State coffers annually? Similarly with the men in the provincial cadre, especially those holding the L. M. & S. degree. Sometimes an L. M. & S. of Madras is posted to a teaching institution and then he is told that unless he quickly gets a higher qualification, he would not be kept there. If he is lucky he obtains study leave abroad—for what? That he may waste his time in working for a so-called *registrable* qualification and then, if possible, to cram to get through

a higher examination! Such instances are very frequent. These study leave grants may be very advantageous to the persons concerned as strengthening their claims in the official ladder and increased emoluments. If does not help the State. There could be no excuse for any medical officer in the District and Taluk Headquarters hospitals to be granted study leave abroad. If it is to be continued in any shape it should only be for people who are attached to teaching hospitals. Those alone who have the highest available academic qualification and distinction in their work should be selected for this grant. They should be required to go abroad and make an intensive study of their specialities which should ordinarily never extend over six months. They should not be sent for mere qualification or passing examinations. We repeat again that such of them who care to finance themselves should be encouraged to go abroad not for mere qualification hunt, but for serious study which would be useful to students and patients here.

We have made an exception of medical men attached to the teaching institutions in the matter of study leave. These are engaged not only in looking after patients, but also in the even more important duties of teaching and training a large number of youths to enable them to become sound practitioners and future teachers. Further, in the years to come, the equally important duties of carrying on post-graduate education and investigation into various branches of medicine would devolve in an increasing degree on them. As such only the best available talent should be engaged for this work. Only those who have the highest available academic hall-mark should be engaged in this work. Further, if these teachers are worth anything, each of them would have worked in some special branch of medicine where he may be an enthusiast. For a teacher, we would insist on both these qualifications. Whatever might obtain in other countries or in other parts of this country, we consider it highly desirable that the future, teachers—in the present and in the immediate future—should satisfy both the above tests—not either of them. Having selected such men, they should periodically be sent abroad for getting familiar with new developments in medicine, the science and the practice of it.

We have dealt with this question of study leave in some detail. We are convinced that the present policy, if any, underlying the selection of medical men for study leave and sending them abroad for post-graduate training is unsound. We hope we have to some extent succeeded in pointing out the evils and indicating the directions in which this system could be improved. To dispel the hazy fears of such of those who may read these pages carelessly, we would once again repeat that we are not minimising the need for post-graduate study for medical men. On the other hand, we are as enthusiastic as any one else about the great need for it to medical men in active practice, independent or salaried. We are certainly against the waste of public funds on individuals for joy-rides in foreign countries without the remotest chance of any benefit to the State or the Public. If there be any individuals who have achieved merit in any branch of medicine and who would be benefited by travel and study abroad, such individuals ought to be helped by the State with generous scholarships and stipends.

ASSOCIATION NOTES.

South Indian Medical Association.

(*The Secretaries.*)

Since our last annual meeting, we were in a state of suspended animation till the 8th of this month. After the strenuous work of last year, nobody will grudge us this short rest. Further the oppressive heat of this year was not conducive to meeting and sitting in a room for nearly two hours.

Lest we should get into a habit of lethargy, we had Dr. P. Rama Rau, our former Secretary, read a paper before the Association.

The new year has started well with a paper from Dr. P. Rama Rau on "X-Ray examination of the heart and the great blood vessels."

The great trouble which the lecturer took to demonstrate many of his findings with diagrams and skiagrams was well recompensed by the keen interest with which many of the members present followed the lecture and the intelligent part, many of them took in the subsequent discussion.

According to the speaker three radiograms are necessary in three positions: Antero-posterior, Right oblique and Left oblique. Great emphasis was laid on screen examination. These examinations help to reveal which portion of the organ tends to enlarge or hypertrophy in the earliest stage.

The lecturer made mention of a number of measurements such as the transverse diameter and the long diameter and the diameter of the base and the cardio-vascular angle.

The cardio-thoracic ratio, which is obtained by dividing the transverse diameter of the heart by the greatest internal diameter of the heart, was greatly stressed by him as an helpful factor in determining cardiac enlargement.

Above all, he said, that he did not minimize the importance of clinical examination and that the various X-Ray examinations and measurements help only to check one's clinical observations.

The paper will be published in a future date.

CORRESPONDENCE.

Recruitment to Health Officer's Course.

Sir,—I received the following reply from the Chief Minister for the letter published in The HINDU dated 16-5-31 under the above caption which I release for the benefit of the future intending candidates:

GRASSMERE HOUSE,
Ootacamund,
4th May 1931.

Dear Sir,—Your kind letter regarding Health Officer's class. I sympathise with you. But Government can't find employment for all who undergo the course. They can settle down as doctors or seek employment under private bodies. I am, however, sending your letter to the Director of Public Health for consideration.

Yours sincerely,

(Sd.) B. MUNISWAMI NAIDU.

This reply will be an eye-opener to all those who intend applying for the course. So, let all those who intend joining the course in future think twice before they do so lest they should be sorely disappointed in their expectations.

V. NATARAJAN,
Pleader.

TRICHY, *June* 3, 1931.

University and the L.M.Ps.

Dear Sir,—The University authorities have been *kind* enough to extend some facilities for the L.M.Ps. But so far no details are available and from what I have been able to gather, the scheme, whilst it looks as a great boon to us, L.M.Ps., does not seem to be of any practical value. If we are to be permitted to appear for the M.B., B.S., after what really comes to be a four-year course, and that after five years of practice, why not permit us to appear for the higher examinations M.D. or M.S., instead of the M.B., B.S. This concession is now available to the four-year trained L.M.S., whose training in the basic sciences are the same as ours and whose degree is not recognised by the General Medical Council of Great Britain.

CALICUT,

3-6-1931. *L.M.P.*

Mofussil Honoraries.

Dear Sir,—The regulations issued for the working of the Honorary medical officers leave the allocation of work to the paid men in charge of the institutions. In some cases we are asked to do work which we did not volunteer to do and in others our duty seems to be merely to assist the local assistant surgeon in routine work. I am prepared to quote specific instances and to show how the spirit of the G. O. is set at naught by the provincial service men in charge of the institutions. I shall be thankful if the Union will take the cause of the mofussil honoraries, whose cries are now like a voice in the wilderness.

7-6-1931. *Hony. Asst. Surgeon.*

Rural Medical Relief.

Sir,—Mr. Ramani in the HINDU has given a really true picture—it is hard to give an exaggerated one of a rural practitioner's difficulties. The practitioner's present position is quite unenviable. In spite of all his independence and freedom for private practice he is between the devil and the deep sea. If he is unostentatious, social and solicitious to the welfare of the suffering sick, the villagers look upon him as one of less than average talents and prefer to go to an outsider or the nearest medical institution; but if he is strict and assertive, though professionally able, he is regarded as hot-headed and avaricious and tabooed. If he sides one or the other party to a faction in the village, he courts danger to his person and property. If however, a practitioner manages to adjust himself to the temperament and needs of the people, and stick to a village he cannot be quite sure of continuing there. He depends, at present not upon his popularity in the village, but mostly upon the extent to which he obliges, or keeps his local authorities—the Taluk Board President especially—in good humour. He should not assert his independence in word or deed; if he does he will not be tolerated anywhere in the Taluk Board. His President can dispense with his services under some pretext. It has happened so in many a case for purely personal reasons and occasionally on miscalculations of prestige.

Apart from the low subsidy, this want of fixity of tenure for a practitioner—depending as it does, upon the sweet will of a President—has, till now, been the cause of the unsuccessful working of the Rural Medical Relief Scheme. Enough safeguards should be provided to the medical man to continue or settle in his village, so long as he is looking very well after

the needs of the poor. This could be done if the power of dispensing with the services of a practitioner be taken away from the President and vested in the Government, to act on the recommendation of an impartial person as the Surgeon-General or the Inspector General of Local Boards and Municipalities as the enquiring authority. Else no rural practitioner of whatever standing or status can hope to settle in a place, though it would be reasonable to expect that one who has been in a village for about half a dozen years—there are some such even now—would not go far out of the terms of his. Agreement and thereby risk the chances of his settling there.

Further, a rural practitioner, especially a senior one should as an independent medical man interested in the spread of skilled medical aid in rural areas, be given a voice in the maintenance and administration of rural dispensaries. A resolution to that effect was passed at the recent provincial conference of these rural practitioners running as follows :

" This Conference approves the principle advocated by the President of this Conference, that the unit of medical relief by the Government be a hospital and not a dispensary, and suggests that for the purpose of effectively popularising scientific methods of treatment the rural medical practitioner should be more liberally subsidised than at present and for this purpose reiterates the principle contained in the 1st resolution of the 1st Conference and suggests the following modified resolution for the kind acceptance of Government :

" This Association of the Provincial Rural Medical Practitioners suggests to Government that as no uniformity prevails in the maintenance or administration of rural dispensaries, even in the same district, the district instead of the taluk be taken as the unit of administration and independent medical men be encouraged to settle in villages by subsidising them with money grants through a District Medical Council composed of the following :

" (1) The District Collector ; (2) The President of the District Board ; (3) Two independent medical men of district to be nomiated by the District Rural Medical Practitioners' Association.

" Any dispute or any breach of the terms of agreement on the part of the Council or the practitioner should be referred to the S. G. or the I. G. of Local Boards and Municipalities for enquiry and report to Government for their final orders."

These subsidised medical men should be regarded as occupying the first stage in their evolution into pucca independent practitioners and honorary officers of poor hospitals. Free medical aid should be rendered only to those who cannot afford to pay for it under any circumstance. At present, many of the so-called poor waste a lot over quacks and their home remedies or pleasing the gods and their pujaris, before going to the rural practitioner who is obliged to treat them free Now that rural dispensaries have been in vogue for nearly six years and people got a fair idea of the scheme, now that prices have fallen down, Government should reduce the chargeable limit from Rs. 30 to Rs. 15 and enable the practitioner to increase the number of his paying patients, and reduce his scale of fees. Large business would mean low charges and people would not be hard hit by such a change. They can give the practitioner what they would otherwise pay their local ' vaidyans.'

Rural Medico.

BULLETIN
OF THE
SOUTH INDIAN MEDICAL ASSOCIATION.
JUNE 1931.

The Control of Pernicious Anemia

" It is generally speedily fatal.

So the medical textbooks declared in 1926, when speaking about pernicious anemia. But in the same year, Minot and Murphy announced the favourable results of feeding liver to patients with that disease. Now patients recover!

Nobody knows what causes pernicious anemia. It is a chronic disease of a progressive nature. The number of red corpuscles is greatly diminished and there are other easily recognized symptoms of its presence.

The pernicious anemia patient of 1929 does not even have to face a daily half-pound of liver in order to combat the disease. He can take his liver portion in extract form, either liquid or powdered.

Three years can make a big difference in dealing with disease."

Disease often presents insurmountable barriers to a frontal attack. In such emergencies, it is sometimes possible to execute a flank movement by which the foe may be quite as effectively routed, although no opportunity may be afforded to establish its identity. For example, the manner and circumstances in which infection occurs in certain diseases are frequently recognized long before the offending micro-organism is detected. In this event, prophylaxis serves to protect society until tardy science dons its seven league boots. The history of diphtheria, syphillis and scarlet fever illustrates this.

It may happen that a therapeutic measure capable of controlling a disease is in use long before the causative factor, or even the manner of its transmission, is suspected, as was the case in the use of cinchona to combat malaria, following its introduction by the Countess of Chinchon more than two centuries before the epochal work of Laveran and Ross.

Liver Feeding Introduced.

Sometimes all the anatomic and physiologic changes associated with a pathologic picture are long known and thoroughly studied without either the causative factor or the essential nature of the disease coming to light. Then one day progress is made, when tireless research succeeds in indicating a drug or a food that appears to supply the factor that the organism lacks even though nothing further of the nature of the ailment is revealed. Such is the case in the recent introduction of liver feeding in the control of pernicious anemia by George R. Minot and William P. Murphy of Harvard University.

In the issue of *The Journal* of the American Medical Association for Aug. 14, 1926, Minot and Murphy announced the results of a diet " composed especially of foods rich in complete proteins and iron—particularly liver—and containing an abundance of fruits and fresh vegetables and relatively low in fats " in the care of forty-five patients suffering with pernicious anemia. These patients, who were observed over a period varying between six weeks and two years, showed practically uniform improvement.

Clinically, there appeared an amelioration of the symptoms of the disease, beginning promptly after the institution of the liver therapy, so that the patients expressed themselves as feeling " better than for two years," and " stronger than after the two times that my blood went low before." The latter commentary calls attention to the fact that spontaneous remissions occur in pernicious anemia uninfluenced by any

treatment whatsoever and the authors at the time of the publication of their protocol freely admitted this but they were able to offer a tabulation of red blood cell counts which showed clearly that the remission induced by the liver treatment is regularly "heralded in the peripheral blood before the end of the first week by the beginning of a most definite rise of the reticulocytes (young red blood corpuscles)."

Furthermore, a summary of the blood cell counts made in their series showed that in these remissions there had occurred a greater rise, longer sustained, than had been the case in any of the previous remissions that these patients had experienced. The table showed that, beginning with forty-five cases and ending with twenty-seven under observation at the end of six months, the average number of red blood corpuscles had risen from 1,450,000 to 4,500,000 in a cubic millimeter of blood. As we shall see, the results announced so modestly by these investigators three years ago have been since completely confirmed by others.

Liver Prices Soar.

The first inkling that the general public had of this new means of combating pernicious anemia came to it over the butcher's counter. Apparently some one had cornered the liver market. The price of that commodity was rising, sometimes it was not to be had at any price. One customer after another clamored for her supply and investigation revealed each to be the mother of an anemic child Deductions and surmises on such information soon precipitated an epidemic of amateur liver cures, during which every pale or weak man, woman or child endured a daily quota of liver in the expectation that a magical transformation would ensue. The wiser among these experimenters consulted their physicians and learned that while the addition of liver to the diet may favourably influence the more ordinary blood impoverishments, the work of the Harvard investigators had shown a specific benefit of the diet only in a special and severe form known as idiopathic, or pernicious, anemia.

Pernicious anemia was first described, in 1849, by Addison (not the one more familiarly known to readers of these pages) as a "general anemia occurring without discoverable cause whatever, cases in which there had been no previous loss of blood, no exhausting diarrhœa, no chlrosis, no purpura, no renal, splenic, miasmatic, glandular, strumous or malignant disease"—in brief, none of the recognised causes of a secondary anemia. It is a widely distributed disease, occurring in all parts of the world and quite common in the United States. Largely, it affects persons of middle age and males more frequently than females.

Addison's Description of the Disease.

Perhaps, as Osler says, the description given by Addison of the afflicted person offers as clear a picture as possible of the disease. Besides it will afford an example of delightful medical style.

"It makes its approach," he says, "in so slow and insidious a manner that the patient can hardly fix a date to the earliest feeling of that languor which shortly is to become so extreme. The countenance gets pale, the whites of the eyes become pearly, the general frame flabby rather than wasted, the pulse becomes large but remarkably soft and compressible. . . There is an increasing indisposition to exertion, with an uncomfortable feeling of faintness or breathlessness in attempting it; the heart is readily made to palpitate; the whole surface of the body presents a blanched, smooth and waxy appearance; the lips, tongue and gums seem bloodless, the flabbiness of the solids increases, the appetite fails, extreme languor and faintness supervene, breathelessness and palpitations are produced by the most trifling

exertion or emotion; some slight edema is probably perceived about the ankles; the debility becomes extreme—the patient can no longer rise from bed; the mind occasionally wanders; he falls into a prostrate and half-torpid state, and at length expires; nevertheless, to the very last, and after a sickness of several months' duration. the bulkiness of the general frame and the amount of obesity often present a striking contrast to the failure and exhaustion observable in every other respect."

Meantime, the most characteristic finding is in the altered condition of the blood. The number of red cells falls from normal to a million or less per cubic millimeter of blood, while the hemoglobin content decreases not quite in proportion, so that each globule contains a relative excess of colouring matter, a distinguishing feature from other anemias. The appearance in the blood stream of various abnormal and undeveloped red blood cells serves further to characterize the disease as also do the lemon-yellow tint of the skin, the dimunition or disappearance of the digestive secretions from the stomach and various disturbances of the central nervous system. Such is the dismal picture of the disease that has apparently been brought under control by the simple expedient of liver feeding.

The germ of the idea of liver feeding in anemia dates back exactly one decade. Of course, the value of a rich diet in improving the condition of the blood has always been appreciated, and from the time that Addison described pernicious anemia this means has naturally been employed in the hope that this idiopathic anemia would also react favourably; but the results have been disappointing, to put it mildly.

In 1918, Whipple, Robscheit-Robbins and Hooper induced anemia in dogs by bleeding, placing them subsequently on a diet of beef liver. They found that this procedure resulted in a "maximal regeneration of hemoglobin and red cells." This suggested to them that the normal liver is concerned with pigment formation and serves as a storehouse for that substance. A few years later, Whipple added that food factors might be expected to have an important effect in the control of pernicious anemia as well, and he further suggested that in pernicious anemia there may be lacking the material necessary for the formation of the body of the red blood cells, if, indeed, an actual disease of the elements of the bone marrow concerned with the building of the red cells did not exist.

Following these announcements, there came various experiments by others to check Whipple's results, among which perhaps the most notable are those of Gibson and Howard, who published, in 1923, some metabolic studies in pernicious anemia that estimated the value of a diet rich in vitamins, as well as in fruit, green vegetables, egg yolk and liver, showing that considerable improvement occurred. Nevertheless, when Minot and Murphy approached the subject, the general opinion prevailed that the ordinary simple anemias were those that should prove most amenable to a diet in which liver predominated. Minot and Murphy, on the other hand, directly attacked the problem of pernicious anemia. In their original paper they quote a statement made by McCollum to the effect that liver and kidney furnish an exceptionally high quality protein, which serves to increase remarkably the growth of animals, and proceeding on Whipple's hint that there may be a scarcity, in pernicious anemia, of the material from which the frame work of the red cell is built, they conclude that "perhaps liver and other foods rich in complete proteins may enhance the formation of

red cells in this disease, especially by supplying material to build their stroma." Clearly, their experiments were based on logical induction and and they merit high praise for their accomplishment.

A Liver Extract

The next step in advance came with the isolation from liver tissue of the effective fraction in blood regeneration, and this was accomplished, in 1927, by E.J. Cohn and his associates of Boston and Randolph West working independently in New York City. This achievement has not only supplied a more palatable substitute for the cloying half-pound daily regimen of liver, but since its use in pernicious anemia is equally as effective as whole liver, a concrete demonstration is afforded of the existence in liver of a substance quite as specific in its effects as the vitamins in various deficiency diseases.

At the meeting of the American Medical Association held in 1928, various papers were presented that covered many phases of the treatment of pernicious anemia by liver diet or the use of a potent extract in its stead. The unanimous opinion expressed at this symposium was that the value of this measure had been adequately established. Ordway and Graham of Albany offered a summary of the results obtained in 578 cases reported from reliable sources, including hospitals and clinics in England and Germany as well as the United States. Of these, 397 had been treated with liver and 191 with liver extract. Uniform and remarkable improvement occurred in all those who carried out the treatment adequately and faithfully.

The patients were under observation for periods varying from one to twenty months. Taking the red blood corpuscle count as the most reliable index of progress, the entire group presented an average of 1,500,000 cells in a cubic millimeter of blood at the commencement of treatment and practically every case attained a level of 4,000,000 cells in the same blood volume at the close of observation.

All clinical evidences of the disease tended to disappear, except that the secretion of hydrochloric acid in the stomach was not resumed and symptom which are dependent upon organic changes which have taken place in the central nervous system naturally persisted. Liver, the conclusions read, furnishes an element apparently lacking in the economy, which is necessary to proper blood formation, but it appears in no way to affect the underlying pathologic process.

Theories about Pernicious Anemia

In an excellent paper, presented at this same symposium, Means and Richardson of Boston consider the deductions as to the nature of pernicious anemia that can be made in view of what has so far been learned. In the first place, they feel that "pernicious anemia is in some sense or other a deficiency disease rather than an infectious, toxic or neoplastic one, as had previously been supposed ; but it seems doubtful that it bears more than a slight resemblance to any other of the deficiencies with which we are familiar."

Apparently the action of liver is not due to any of the known vitamins and while conceivably it might harbour an undiscovered one, still any of the known avitaminoses, such as scurvy, can be induced by withholding the natural source of supply, while the absence of liver (or kidney) from the diet does not cause pernicious anemia. Therefore, it can only be ventured that "in persons who develop pernicious anemia on what would be an adequate diet for the majority of mankind, there must be either some internal obstacle to the acquisition of the specific substance or because of some pre-existing abnormality, an exaggerated requirement for that specific substance."

(*Brandeis in Hygeia*).

BULLETIN
OF THE
SOUTH INDIAN MEDICAL ASSOCIATION.

JUNE, 1931

X-Ray Examination of the Gastro-Intestinal Tract.

By Dr. P. Rama Rau,

Unique X-Ray Institute, 56, Thumbu Chetty Street, Madras.

"While the Roentgen examination may be looked upon as a method of precision, yet the percentage of errors is probably larger in gastro-intestinal examinations than in the examination of any other portions of the body." You will pardon my commencing this paper with a sentence which negatives the very importance of the use of X-Ray examination of the stomach and intestines. But, it is common knowledge, that these hollow viscera which are filled for purposes of X-Ray examination with opaque emulsion, change so frequently in different individuals in their size, shape, position and motility and are so influenced by the habitus, mental conditions, drugs, food, and reflexes from abdominal lesions not connected with the gastro-intestinal tract. However, X-Ray examination should always be done in cases where cancer or ulcer is suspected or where there is a history of gastric disturbance of duration, specially in patients over forty where cancer is so common and the only hope is its early recognition. If, anyhow, there is gross difference between the various laboratory and clinical findings of the Clinician and the Radiologist, it is wise under such circumstances not to lay too much stress on Roentgen results.

For an opaque meal or enema I use Merck's "Citobarium", the preparation for internal administration making a pleasant and palatable homogenous emulsion when mixed up with water, or sometimes 6 to 8 ounces of barium sulphate emulsified with gum, milk, sugar and some flavouring material. It is sometimes advisable to add some petrolagar to the meal or enema, specially the latter to prevent the retention of barium on account of absorption of the liquid in the emulsion. We strive by means of this opaque material to demonstrate the actual deformity caused by the organic lesion, a positive finding being extremely valuable.

Preparation and Procedure.—To examine the œsophagus no previous preparation is necessary. For the stomach and duodenum the patient attends in the morning without breakfast. I usually do not advise any cathartic the previous day as it is likely to cause increased peristalsis. If the patient is very constipated and it is necessary to follow the meal to the colon an aperient is given couple of days prior, and an enema on the morning of the examination. I take a picture five minutes after ingestion of the opaque meal in the vertical position, and two or three more at intervals of half an hour in the prone position—then a four hour picture to see the emptying capacity of the stomach, an 8 hour exposure to see the head of the meal at the coecum and 24 hours for the colon—sometimes even 48 hour pictures are taken. For demonstrating organic lesions of the colon alone, a barium enema is given after a preliminary cleansing bowel wash. A picture is taken a few minutes after the enema and another immediately after evacuation.

The œsophagus is best seen in the right anterior oblique position. Barium emulsion is given to swallow and while the meal is descending an exposure is taken. Where the constriction is not very great, soft pieces of bread soaked

in opaque meal is given. The normal œsophagus is slightly narrowed at the level of the sternoclavicular joint, at the bifurcation of the trachea and the cardiac end. The food is delayed or arrested in passage according to whether there is spasm, actual stricture caused by a lesion inside the lumen of the œsophagus, pressure of a growth from outside or impaction of a foreign body. In cardiospasm, a condition termed "œsophagectesia", the tube is dilated above the spasmodic constriction giving an inverted cone like appearance, the barium trickling down from the apex of the cone, while in organic lesion you have an irregular appearance of one side of the wall caused by invasion into the lumen. In young people strictures are caused by accidental drinking of acids and irritants and are invariably situated in the middle portion. In elderly people carcinoma and gumma are the common causes, middle and mostly cardiac end being often affected. Luetic and malignant strictures are similar in appearance, and are difficult to distinguish by their X-Ray appearances. Pressure from mediastinal growths or aneurysms of the aorta give a smoother outline in contrast to the moth-eaten appearance in carcinoma. Impaction of foreign bodies which are opaque to X-Rays usually throw a good shadow, while non-opaque bodies are recognised by the partial or complete arrest of barium meal at the level of impaction.

Normal stomachs vary, as I said before, in shape, size, position, etc., and are usually classified as high transverse type, cow-horn type and fish hook type, common in fat, medium and thin people respectively. The long axis directed from the cardia to the right and slightly downwards, the pyloric opening forming the lowest point of the gastric outline is an example of the transverse type, hypertonic, situated high up in the abdomen and well above umbilicus. In the fish hook type the lesser curvature descends vertically, slightly inclined to the right to about three-quarters of the distance and sharply bends up to the pylorus, the body of the stomach lying invariably to the left of the median line. There might be degrees of variation between these two.

Stomach walls normally smooth, vary in peristaltic activity and emptying time, and are deformed according to the extent of the organic lesions. Benign gastric ulcer usually present at the pylorus, sometimes on the lesser curvature, common in young and middle life is recognised by a niche, accessory pocket and a filling defect. Niche is a localised projection from the stomach outline caused by opaque material filling a sort of cul-de-sac "the crater of the ulcer" formed by the destruction of gastric musculature by the ulcer. When the basal diameter is larger than 3/4 inch malignancy should be suspected. Accessory pocket forms when the ulcer penetrates further into extra gastric tissues forming a rounded projection with a constricted neck and may be accompanied by spasmodic incisura of the greater curvature. The barium is invariably retained even after the stomach is emptied—a point of distinction from a niche. Filling defect is depression in gastric outline round the seats of ulcer caused by inflammatory induration and might considerably distort the normal margin. Increase in tone (hypertonic condition), peristaltic waves producing hour-glass-contraction and incisura opposite to the seat of ulcer, pyloric spasm and consequent delayed emptying are the main features of ulcer of the lesser curvature of the stomach. Later, according to the degree of obstruction to the passage of food, the stomach gets dilated and loses tone. In gall bladder adhesions the defect at the pylorus is difficult to be distinguished from ulcer and so

also in spasm caused by reflex from chronic appendix. In such cases it is good to administer atropin and repeat the examination whenever necessary.

Carcinoma might affect the cardiac end, body and pyloric end of the stomach and unlike benign ulcers might involve the greater curvature. As a matter of fact, early carcinoma of the lesser curvature cannot be distinguished from benign ulcers but any lesion of the greater curvature is invariably malignant. When the cardiac and pyloric ends are involved, the patient very often comes early for relief of consequent symptoms, while in extensive growth in the body there might be few symptoms as it does not interfere with emptying, etc. There is always the characteristic filling defect on account of infiltration of the walls or growth in the walls bulging into the lumen of the organ itself. At the pylorus the affection might be annular involving completely the pyloric ring and causing obstruction to any degree or invasive showing a persistent filling defect on one side only. The peristaltic movements being arrested at the site of the lesion, the pre-pyloric portion gets saccular and dilated and the barium is retained from 10 to 24 hours. Sometimes a growth external to the stomach might on account of pressure on the wall produce a large indentation simulating a filling defect—common ones are omental growths or tumours of the head of the pancreas. It is a much debated question whether or not carcinoma is a transition from an old ulcer and if so it is difficult to ascertain when the malignancy begins. Here again we should keep syphilis in mind specially when the patient is young and there is a large lesion in the stomach. To sum up the difference between carcinoma and benign ulcers, in carcinoma you have active peristalsis and rapid evacuation, might affect any part of the stomach and peristalsis is arrested at the site of lesion on account of extensive induration: in ulcer there is hyperperistalsis and slow evacuation, situation is generally in the lesser curvature, never in the greater, and the filling defect is small, the peristalsis not being interfered with unless the ulcer be large. In scirrhous carcinoma, the widespread inflammation affecting the whole body of the stomach visualises what is known as the "leather bottle" stomach, the opaque emulsion running s t r a i g h t through a fixed, narrow, tortuous tube into the duodenum, the pylorus being open and rigid like the rest of the viscus—very little barium is retained in the stomach—weak or no peristalsis and rapid evacuation due to pyloric incompetence.

Sometimes you come across a case where viscera are transposed in cases of dextrocardia. Frequently foreign bodies are seen. I had an interesting case in which a scarf pin 3½″ long swallowed by a boy 6 years old was found lodged in the pelvis on the 2nd day and after 3 days was removed under anæsthesia from high up in the rectum. Healing signs after medical treatment is indicated by lack of spasm, absence of filling defect and return to normal peristalsis. After gastro-enterostomy at the new opening you find the meal dribbling down, stomach emptying more rapidly than in normal individuals. If this opening partially closes, there is delay and retention; if it does not heal you find niche and filling defect at the stoma. After resection there is such complete change in the shape and position of the organ, that it is rarely possible to determine recurrence by X-Ray examination.

Except the duodenum, the rest of the smaller intestines show little detail in Roentgen examination. The irregular feathery appearance of the jejunum caused by barium scattered between

the folds of the valvulae conniventes, as compared with the more continuous, dense, shadow of the barium in the ileum on account of retention and accumulation, are of little diagnostic value except where they are all matted together on account of chronic inflammatory adhesions or when they are considerably displaced by some abdominal tumours. Adhesions are diagnosed when there is definite retention in coil or coils, dilatation and hyperperistalsis in a segment. Widespread adhesions might be suggestive of tubercular peritonitis.

The first part of the duodenum, termed the 'duodenal cap' is the commonest seat of ulcer and is morphologically similar to the stomach—any stimulation of the cap stimulates the stomach and peristalsis is increased. In gastric ulcer there is increased peristalsis with spasm of the pylorus causing delayed motility, while in duodenal ulcers when food comes in contact with the raw area, the contraction caused pushes on the food and steps up peristalsis in the stomach, and this in turn pours fresh material into the duodenum which in turn contracts again. There is no spasm and the entire function of the stomach and duodenum is speeded up—hyperperistalsis and hypermotility. Normally the duodenal cap is cone shaped, the apex rounded, well defined, smooth and regular in outline. In ulcer it presents varied deformities—Niche, accessory pocket, filling defect, spasmodic incisura opposite seat of ulcer, and multiple spasmodic contractures showing great irregularity in shape. Unlike in the stomach, spasmodic contractures of the duodenum always indicate definite organic lesion—in other words duodenum never shows any deformity or spasm on account of reflex from lesions extra-duodenal.

Periduodenal adhesions gives an irregular margin to the cap, but the shadow changes considerably as the position of the patient is changed and stomach gets emptied. A distended gall-bladder might, on account of pressure, cause a crescent shaped depression. Carcinoma of the head of the pancreas causes a centrifugal displacement of practically the whole of the duodenum, the piece of gut forming a big C with the enlarged head of the pancreas enclosed—the pressure of the head gives the duodenum a dilated and partly segmented appearance.

Normal colon is largest in size at the coecum, gradually narrowing until rectum is reached, and again widening at the rectal ampulla. Normally, barium meal should be in the coecum two hours after stomach has emptied. The head of the meal should be at the hepatic flexure from 6 to 9 hours, at the splenic flexure from 9 to 12 hours and in the rectum 16 to 24 hours. Delay in passage indicates colonic stasis and tendency to constipation. Common among the lesions in the colon are those in the right lower quadrant—Appendicitis, incompetence of ileocoecal valve, adhesions and angulations, tubercular ulcerations and carcinoma. Retention in the coecum causes dilatation, and might be accompanied by chronic appendix.

A normal appendix can be observed in its peristaltic movements, the lumen alternately filling with barium and emptying itself, the cycle being repeated until the coecum is empty. In acute appendicitis X-Ray examination is rarely done and the appendix is rarely visualised. In chronic cases except where the lumen is more or less obliterated, the appendix casts an elongated, curled up and kinked shadow, being bound down by adhesions. Chronic appendicular disease is definitely indicated by irregularity of the lumen, fixed kinks and angulations, presence of concretions, involvement in adhesions and abnormal retention of

contents. This last condition visualises the appendix for a day or two, and indicates a dangerous appendix with poor drainage or emptying capacity.

True ileal incompetency is present only when a barium meal is seen in the terminal ileum at a subsequent examination, when once it has already emptied itself into the coecum. The influx of opaque emulsion into the terminal ileum when a barium enema is given cannot be considered as such.

Adhesions involving the coecum, terminal ileum and omentum are common and especially in women with pelvic infections, and are indicated by fixation of normally mobile parts and definite demonstrable deformity.

Tubercular ulcerations are associated with filling defects and spasm in the coecum and colon and hypermotility. Normal colon has what is called "mass movements" *i.e.*, movements and long intervals of rest alternately in contrast to the continuous movement in the stomach and smaller intestines. In tubercular ulcerations the motility is so great that the barium is entirely passed out within twenty to twenty-four hours.

Common seats of ulceration due to carcinoma seem to be coecum, transverse colon and sigmoid, and is characterised by filling defect with irregular serrated edges, size depending on extent of the lesion.

I once again lay stress on the necessity of a colon wash before giving a barium enema, because the emulsion passing round foecal masses might simulate different lesions.

In acute colitis you have deep haustration and spasm, barium embedded in shreds of mucus giving a string like appearance in the bowel. In chronic conditions the usual haustration of the colon is absent on account of thickening of the bowel wall. Fibrous strictures resulting from ulcerative colitis are frequently multiple and appear as annular constrictions. The bowel adjacent to the constriction are smooth and regular unlike the irregular filling defects in neoplastic growths.

Megacolon is an abnormality characterised by an enlargement and lengthening of the colon in general; often the pelvic colon alone might be elongated being seen forming a loop or two between the rectum and sigmoid. I had a case, a lady who used to take large enemas 8 to 10 pints at a time. When I gave a barium enema and took a skiagram I found the pelvic colon forming three loops before reaching the sigmoid flexure one of the loops rising higher than the umbilicus.

"Suka-Sanni."

By Dr. T. S. A. Padmanabhan (*Cannanore*).

I doubt whether there is any Indian brother practitioner (born and bread up amongst Indians) that does not know what "Suka-sanni" means. Yet a brief description of the fever, even at the outset will not be out of place.

One is called in to see a patient with the following history: to put it in the caller's own words "Mr. A or B employed in Cochin, Madras or Bombay came to his wife's house about four or five days back. He had a good oil bath and a heavy meal; you know, Doctor, the husband and wife were long separated and so............ Next morning or the day after the patient got sudden fever with or without rigor. He has intense headache and severe generalised pains; eyes blood-red; patient raving; bowels not moved; abdomen uneasy and prominent; fever not uniform; certain areas hot and pungent, certain other areas, especially hands and legs very cold; sweatings now and then."

On examination, one finds a patient highly toxæmic, delirious and often maniacal, face flushed; eyes severely injected; pupils equal, but more often than not, contracted; conjunctival reflex, not extinct, though the quickness and intensity of response might vary; tongue dry, thickly coated; abdomen slightly prominent, tenderness may or may not be present; bowels bound; pulse rapid, bounding and full-tensioned; heart corresponds to the pulse; lungs normal or congested here and there; bladder shows retension or incontinance; reflexes not exaggerated, Kernig's sign absent; axillary temperature 104-106-F.; sweats now and then.

The analytic mind thinks of various possibilities ranging from cerebral typhoid of a sudden onset to some pontine lesion of unknown cause. But, the one that fixes itself to one's mind is cerebral malaria, and this for the following reasons:—(1) Very few of us have microscopes and we feel we cannot afford to wait for the microscopic results, even if the slides were to be sent to the nearest microscope-station, which in some cases may be miles off; as a result, we allow ourselves to err on the safe side (with what amount of justification, I cannot say) by making a tentative diagnosis of cerebral malaria and giving an I. V. Quinine. (2) Many of these cases give a history of previous attacks of real or pseudo malaria and a few cases give a history of recent residence in some malarial place. (3) Such clinical phenomena as Kernig's and other meningeal signs are notoriously variable in cerebral malaria and as such their absence is no conclusive proof to justify any one to negate cerebral malaria.

As regards treatment, suffice it to say that it all depends on the whims and fancies of the medical attendant; I do not want to bore any one with more remarks on this; but there is a particular form of treatment advocated and adopted by my old granddam, and this, I shall place before my readers, since it appears to be very ingenious, intelligent and fitting with the present day theories of our own.

She makes a few scratches with the sharp point of the broken piece of a glass bangle on the ilio-pectineal region, as close as possible to the labia in females and beneath the sole of the great toes in males; removes ten to fifteen drops of blood; mixes this with about thrice the quantity of betel leaf juice in which a full clove and a full seed of red gram (dall) have been well rubbed. A small portion of this, she paints over both the conjunctiva and the major portion, she administers per os. She affirms, the results are brilliant, the treatment being almost specific; and the patient recovers in a few days, the ravings, etc., ceasing in a few hours.

I cannot vouchsafe to the accuracy of the above statements. The whole thing, certainly appears to be the cinema actions of a fiery imagination; but there is no denying of the fact that there exists a substratum of truth beneath all these gross and droll; and an itching hand impels me to pen a few lines further on my own impressions on the above—these again perhaps only the furious workings of my own feverish brain.

1. The treatment cited above distinctly shows that, what, we call Immune Therapy, was actually practised in ancient India; it might be that the methods adopted were crude (though direct) and it might also be that the various theories bombasted and broadcast now-a-days were unknown to them. The same remarks apply to the present day Hæmo-, and Transfusion therapies too.

2. I should think that this peculiar affection 'Suka-sanni' has some con-

nection with the autonomous nervous system. A glance at the history tells us of three important etiological factors, (*a*) over-exertion, (*b*) oil-bath, (*c*) sexual connection.

About the first I need not say anything.

As regards the oil-baths I am firmly convinced that we, the Allopathic practitioners, do not attach to them all the importance that they really deserve. It is all well and good to say that baths should be prohibited soon after exercises. Now, what does this mean? It only means that when the body is fatigued baths are harmful; and who knows, who can definitely say when any particular body has regained its normality after fatigue? If such be the case with ordinary baths, does it not stand to reason that oil-baths are much more injurious? The effects of an oil-bath can only be experienced and not described. To our purpose here, I should think that an oil-bath throws the vessels and nerves in a state of tonus, especially when the bath is prolonged and accompanied with a good massage; and the slightest over-stimulus upsets the equilibrium and throws the vessels and nerves out of gear.

It is at such a time as this, when the nerves, especially, the acutely delicate ones of the autonomous system, are in a condition of high-pitched tonus or, as more often happens, in a condition of concealed fatigue, that the sexual intercourse takes place.

I have no doubt that sexual intercourse does injure the sympathetic chain. I base this assertion of mine on the following facts and theories. (1) The individual experience of fatigue and a severe type of neurasthenic manifestations, the day after the sexual act. (2) The presence of eosinophilia in blood for nearly twenty-four hours after intercourse. I can vouchsafe for the authenticity of this statement, since I have actually found it out after experimenting on myself during my college days. The question may be asked whether there is any connection between the eosinophilia and sympathetic fatigue. Well, on a reference to the various causes of eosinophilia, I find the following also enumerated, among various others—Post Febrile states, Addison's disease, Ovarian maladies, Asthma, certain skin affections, etc. Whatever might be said of the first and the last, we all know, both from clinical symptoms and therapeutic results, that Addison's disease, ovarian maladies and asthma are intimately connected with the sympathetic chain and there is a condition of sympathetic atonia in these cases.

Generalisations are always bad, I admit, but I think I am only reasonable in presuming that the constant presence of eosinophilia after a sexual intercourse (as evidenced, at least in my own case), shows a distinct relationship between the sexual connection and sympathetic atonia, if it can be positively said that eosinophilia is constant in all cases of sympathetic atonia.

When, once, one is convinced of the possibilities and the probabilities of the sympathetic chain being injured or otherwise involved by sexual acts, it needs no pointing out on my part that the harm done here is much more since as I have shown, the sympathetic is already in a state of fatigue or over-tonus—in other words, at the breaking point.

I have only two points more to elucidate in support of my contention, *viz.*, whether sympathetic atonia is capable of causing hyperpyrexia and whether this particular fever is due to sympathetic atonia.

As regards the first we all have heard of hysterical fever (where, the fever goes up even to 110-F.), nervous fever, fright fever, etc.—the last especially in

infants and children. Have we not heard our granddams say "Don't frighten children" and have we not actually come across cases in our own homes, where a young babe, frightened in the evening, takes to bed with high temperature before midnight? And do we not know, that fear, one form of emotion, upsets the adreno-sympathetic apparatus in the body? If one can accept all these why not concede also that upsetting of sympathetic may give rise to fever and hyperpyrexia?

Coming to the next point, whether the affection in question is the direct outcome of the changes in the sympathetic—well, I confess I cannot say anything positive on this. It may be or may not be. But there can be no question as to the involvement of the sympathetic system here, for the clinical symptoms definitely show that it is involved. It may be the cause or the effect of the fever or even a co-existing condition in the degree of a common causative factor. It is for the research worker to find out what it exactly is.

To sum up

1. There is a special kind of fever called 'Suka-sanni' not described in text books but widely known throughout the length and breadth of India.

2. The symptoms are closely allied to the changes in the sympathetic; these changes may be all round or at the thermogenic centre or in the pons, an important call station in the path of the voluntary and involuntary nerves. Onset is sudden. Duration varies from one to four weeks. Prognosis variable.

3. One of the indigenous treatments closely corresponds to the modern ideas of Immuno and Transfusion therapies with an incidental stimulation (an actual wakening up, as it were) of the sympathetic, as evidenced by the painting of the conjunctiva with irritants.

4. The cause of the fever, in the writer's opinion, may be "sporadic and uncontrolled impulses from the sympathetic chain (or one of its important centres in the Pons), while trying to recover from an over-fatigued condition."

Review—Warning.

Clinical Thermometers.

Dr. A. Stewart Robertson (Weston-Super-Mare) writes in the *B. M. J.* of May 9, 1931:—

I think practitioners should be warned to be careful in the use of the cheap thermometers now on the market. Having reason to suspect the accuracy of one I was using, I tested 14 of them simultaneously in warm water at two different temperatures and two different periods of time—2 min. and 1 min. respectively. The thermometers are all marked "½ min." and each carried with it the following certificate of guarantee.

"This is to certify that the clinical thermometer enclosed has been compared with our standard (corrected by the Government National Physical Laboratory, Teddington, England), and found correct within 0·2°F. Also that the bulb is of 'normal gass,' which makes the thermometer unalterable for all time."

The readings obtained were as follows:—

2 min.	Immersion.	1 min.
108·8		103·6
108·8		104·4
108 4		103
108 6		103·2
108·8		103·4
109		104·2
109·4		103·6
110		105·4
108·6		104
109·8		104·4
109		105·4
108		104·2
109		
109·6		

It would have been interesting if Dr. Robertson had given the temperature of the water of immersion. We wonder if the certificate was meant only to cover the range of ½ minute exposure!!